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In The
Supreme Court of the United States

DONALD P. ROPER, SUPERINTENDENT,
POTOSI CORRECTIONAL CENTER,

Petitioner

v.

CHRISTOPHER SIMMONS

On Writ Of Certiorari To The Supreme Court Of Missouri

BRIEF FOR THE AMERICAN PSYCHOLOGICAL ASSOCIATION, AND THE MISSOURI PSYCHOLOGICAL ASSOCIATION AS *AMICI CURIAE* SUPPORTING RESPONDENT

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INTEREST OF *AMICI CURIAE*[1]

The American Psychological Association (APA) is a voluntary nonprofit scientific and professional organization with more than 155,000 members and affiliates. Since 1892, the APA has been the principal association of psychologists in the United States. Its membership includes the vast majority of psychologists holding doctoral degrees from accredited universities in the United States.[2]

An integral part of the APA's mission is to increase and disseminate knowledge regarding human behavior and to foster the application of psychological learning to important human concerns. In 2001, the APA recognized that there are unique problems with assessment of juveniles who, under existing law, may be subject to the death penalty and called for a halt to such executions until it could be established that such deficiencies had been addressed. The body of research that has developed, including significant research findings in the last three years, indicates that these deficiencies have not been and cannot be corrected.

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[1] Letters from the parties consenting to the filing of this brief have been filed with the Clerk of this Court, pursuant to Sup. Ct. R. 37.3(a). No counsel for a party authored this brief in whole or in part, and no person or entity, other than the *amici curiae*, their members, or their counsel, made a monetary contribution to the preparation or submission of this brief.

[2] *Amici* acknowledge the assistance of Thomas Grisso, Ph.D., Laurence Steinberg, Ph.D., Robert Kinscherff, J.D., Ph.D., Kirk Heilbrun, Ph.D., Randy Otto, Ph.D., Elizabeth S. Scott, J.D., Laura Schopp, Ph.D., Elizabeth Cauffman, Ph.D., and Joel Dvoskin, Ph.D. in the preparation of this brief.

Research cited in this brief includes data from studies conducted using the scientific method. Such research typically is subject to critical review by outside experts, usually during the peer review process preceding publication in a scholarly journal.

The Missouri Psychological Association is the only statewide professional organization for Missouri psychologists. Begun in 1954, it has a membership of approximately 420. It is the professional voice for the advancement of psychology at the state Capitol, and serves Missouri's citizens through professional practice, scientific consultation, and public service.

SUMMARY OF ARGUMENT

A. At ages 16 and 17, adolescents, as a group, are not yet mature in ways that affect their decision-making. Behavioral studies show that late adolescents are less likely to consider alternative courses of action, understand the perspective of others, and restrain impulses. Delinquent, even criminal, behavior is characteristic of many adolescents, often peaking around age 18. Heightened risk-taking is also common. During the same period, the brain has not reached adult maturity, particularly in the frontal lobes, which control executive functions of the brain related to decision-making.

Adolescent risk-taking often represents a tentative expression of adolescent identity and not an enduring mark of behavior arising from a fully formed personality. Most delinquent adolescents do not engage in violent illegal conduct through adulthood.

The unformed nature of adolescent character makes execution of 16- and 17-year-olds fall short of the purposes this Court has articulated for capital punishment. Developmentally immature decision-making, paralleled by immature neurological development, diminishes an adolescent's blameworthiness. With regard to deterrence, adolescents often lack an adult ability to control impulses and anticipate the consequences of their actions. Studies call into question the effect on juvenile recidivism of harsher criminal sanctions.

B. The mitigating effect of adolescence cannot be reliably assessed in individualized capital sentencing.

Adolescents are "moving targets" for assessment of character and future dangerousness, two important considerations in the penalty phase of capital trials. As one example, psychologists have been unable to identify chronic psychopathy, also known as sociopathy, among adolescents. Assessments of such severe antisocial behaviors during adolescence have yet to be shown to remain stable as individuals grow into adulthood. Consequently, attempts to predict at capital sentencing an adolescent offender's character formation and dangerousness in adulthood are inherently prone to error and create an obvious risk of wrongful execution.

The transitory nature of adolescence also means that an adolescent defendant is much more likely to change in relevant respects between the time of the offense and the time of assessment by courts and experts. At sentencing, an offender may behave and look more like an adult than he or she did at the time the crime was committed. Impressions of the maturity and responsibility of adolescent offenders may also be impermissibly influenced by unconscious racism.

C. Immaturity of judgment, which is generally characteristic of adolescent development, will affect a defendant's participation in earlier stages of the criminal process. A recent study found adolescents overrepresented among defendants who had falsely confessed to crimes. Other research that examined psychosocial influences on legal decisions found that developmental immaturity may adversely affect an adolescent's decisions, attitudes, and behavior in the role of defendant. Individualized capital sentencing cannot correct for the heightened risk of error produced by less mature adolescent decision-making at earlier stages of the criminal process.

ARGUMENT

BEHAVIORAL STUDIES AND RECENT NEUROPSYCHOLOGICAL RESEARCH DEMONSTRATE THAT EXECUTION OF THOSE UNDER 18 YEARS OLD WHEN THEIR OFFENSES WERE COMMITTED WOULD NOT FURTHER THE CONSTITUTIONAL PURPOSES OF THE DEATH PENALTY AND WOULD NOT MEET EIGHTH AMENDMENT STANDARDS

A. Adolescents, As A Group, Think And Behave Differently From Adults In Ways That Undermine The Court's Constitutional Rationale For Capital Punishment In Cases Of Adolescent Offenders

Adolescence is the bridge between childhood and adulthood. It commonly is defined as beginning at age 10 or 11 and continuing until age 18 or 19. *See, e.g.*, Jeffrey Jensen Arnett, *Emerging Adulthood: A Theory of Development from the Late Teens Through the Twenties*, 55 Am. Psychologist 469, 476 (2000). Adolescence is a unique stage of human development, bearing its own distinctive psychosocial and physiological traits that shape judgment and behavior. Those developmental differences adversely affect the reliability of determinations about the character and long-term behavior of adolescents, including 16- and 17-year-olds, particularly with regard to the imposition of the death penalty. *See* Laurence Steinberg & Elizabeth S. Scott, *Less Guilty by Reason of Adolescence: Developmental Immaturity, Diminished Responsibility, and the Juvenile Death Penalty*, 58 Am. Psychologist 1009, 1014-1015 (2003).

Sixteen and 17-year-olds, the vast majority of whom live at home with their families and attend secondary school, occupy a special status between childhood and young adulthood. Many social norms endorse this special status through restrictions on decision-making in, for example, voting, contracting, and jury service. In this

regard, the law presumes what science demonstrates, that 16- and 17-year-olds are not yet mature in ways that affect their decision-making capabilities.

1. Adolescence is a period in which character is forming and often involves heightened risk-taking and even criminal conduct which are moderated or eliminated by the individual in adulthood

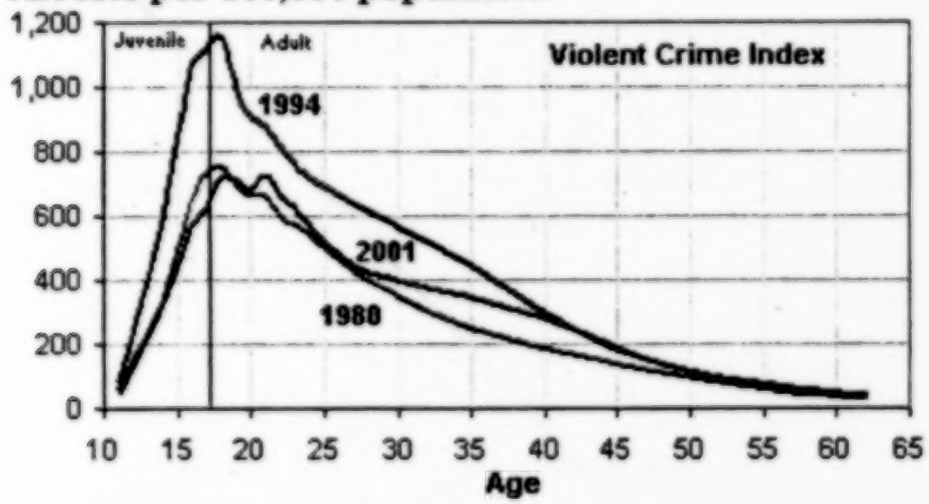
Adolescents, as a group, are overrepresented statistically in virtually every category of reckless behavior, although recklessness does not necessarily characterize all adolescents, and recklessness varies in degree. *See* Jeffrey Arnett, *Reckless Behavior in Adolescence: A Developmental Perspective*, 12 Developmental Rev. 339, 339 (1992). Late adolescence is a developmental period during which individuals are particularly prone to risky behavior. From early to late adolescence, death rates increase by more than 200% – the single largest increase between any two age groups. *See* Charles E. Irwin, Jr., *Adolescence and Risk Taking: How Are They Related?*, *in Adolescent Risk Taking* 7, 7 (Nancy J. Bell & Robert W. Bell eds., 1993). *See also* Centers for Disease Control and Prevention, *Deaths: Leading Causes for 2001*, Nat'l Vital Stat. Rep. No. 52-9, Nov. 7, 2003, at 13 (showing 2001 death rates for early and late adolescents as 19.2 and 66.9, respectively, signaling a 248% increase).

When "crime rates are plotted against age, the rates for both prevalence and incidence of offending appear highest during adolescence." Terrie E. Moffitt, *Natural Histories of Delinquency*, *in Cross-National Longitudinal Research on Human Development and Criminal Behavior* 3, 4 (Elmar G.M. Weitekamp & Hans-Jurgen Kerner eds., 1994). A steep increase "in antisocial behavior between ages 7 and 17" is mirrored by a steep decrease "in antisocial behavior between ages 17 and 30." *Id.* at 7. With slight variations, the general correlation between age and crime holds between "males and females, for most types of

crimes, during recent historical periods, and in numerous Western nations." *Id.* at 4. One cross-cultural comparison found that the age distribution of delinquency for a ten-year period was indistinguishable between Argentina, England and Wales, and the United States. Travis Hirschi & Michael Gottfredson, *Age and the Explanation of Crime*, 89 Am. J. Soc. 552, 555 (1983). The same authors concluded that "[o]ne of the few facts agreed on in criminology is the age distribution of crime." *Id.* at 552.

The same trends hold in the United States where, sampling the last two decades, the rates of offending for serious crimes build steeply to 18, before starting to drop off, as demonstrated by the following chart.

Arrests per 100,000 population



Note: The Violent Crime Index includes the offenses of murder and nonnegligent manslaughter, forcible rape, robbery, and aggravated assault.

Source: Office of Juvenile Justice and Delinquency Prevention, U.S. Department of Justice, *Statistical Briefing Book, at* http://ojjdp.ncjrs.org/ojstatbb/crime/qa05301.asp?qaDate=20030531 (last visited July 9, 2004).

On average, adolescents are risk takers to a far greater degree than adults. Behavioral studies indicate that adolescents often undervalue the true consequences

of their actions. Instead, adolescents, as a group, often value impulsivity, fun-seeking, and peer approval more than adults do. *See* Laurence Steinberg, *Adolescence* 88 (6th ed. 2002). Indeed, numerous rigorous self-report studies have documented that it is statistically normative for adolescents to engage in some form of illegal activity. *See* Moffitt, *supra*, at 29. But levels of planning and thinking about the future increase as adolescents grow older. *See* Jari-Erik Nurmi, *How Do Adolescents See Their Future? A Review of the Development of Future Orientation and Planning*, 11 Developmental Rev. 1, 29 (1991). In sum, the same person who engages in risky or even criminal behavior as an adolescent may moderate or desist from these behaviors as an adult. Indeed, most do.

2. Adolescent decision-makers on average are less future-oriented and less likely to consider properly the consequences of their actions

In comparison with adults, studies show that adolescents are less likely to consider alternative courses of action, understand the perspective of others, or restrain impulses. In a study of more than 1,000 adolescents and adults, researchers investigated the relationships among the factors of age, maturity, and antisocial decision-making. Elizabeth Cauffman & Laurence Steinberg, *(Im)maturity and Judgment in Adolescence: Why Adolescents May be Less Culpable Than Adults*, 18 Behav. Sci. & L. 741 (2000). Adolescents, on average, were "less responsible, more myopic, and less temperate than the average adult." *Id.* at 757. In this study, the most dramatic change in behavior occurred sometime between 16 and 19 years of age, especially with respect to "perspective" (*i.e.*, the consideration of different viewpoints and broader contexts of decisions), and "temperance" (*i.e.*, the ability to limit impulsivity and evaluate situations before acting). *Id.* at 756. And it was not until age 19 that this development of responsible decision-making plateaued. *Ibid.* These findings indicate "that once

the developmental changes of adolescence are complete, maturity of judgment may stabilize." *Ibid.*

In another analysis of decision-making competence, adolescents performed more poorly than adults. Bonnie L. Halpern-Felsher & Elizabeth Cauffman, *Costs and Benefits of a Decision: Decision-Making Competence in Adolescents and Adults*, 22 J. Applied Developmental Psycholog. 257, 268 (2001). Although even greater differences prevailed between younger adolescents and adults, the researchers concluded "it is clear that important progress in the development of decision-making competence occurs sometime during late adolescence." *Id.* at 271. The researchers explained that "these changes have a profound effect on their ability to make consistently mature decisions." *Ibid.* Adults, for example, were better able to weigh the options available to resolve an issue. *Id.* at 268; *see also* Lita Furby & Ruth Beyth-Marom, *Risk Taking in Adolescence: A Decision-Making Perspective*, 12 Developmental Rev. 1, 1 (1992) (highlighting how adolescents seek different outcomes than adults from decision-making).

Adolescent behavior is also affected by its social context. Peer behaviors are a very important aspect of delinquent involvement. *See* Dana L. Haynie, *Friendship Networks and Delinquency: The Relative Nature of Peer Delinquency*, 18 J. Quantitative Criminology 99, 123 (2002). Research shows that the likelihood of being influenced by peers declines after individuals reach adulthood. Peggy C. Giordano et al., *Changes in Friendship Relations Over the Life Course: Implications for Desistance from Crime*, 41 Criminology 293, 319 (2003) (longitudinal study). Increased strength of a friendship network can increase the influence of peers on behavior. *See* Dana L. Haynie, *Delinquent Peers Revisited: Does Network Structure Matter?*, 106 Am. J. Sociology 1013, 1048 (2001). Delinquent behavior, peer associations, and delinquent beliefs together influence each other. *See* Terence P. Thornberry et al., *Delinquent Peers, Beliefs, and*

Delinquent Behavior: A Longitudinal Test of Interactional Theory, 32 Criminology 47, 74-75 (1994).

3. Neuropsychological research demonstrates that the adolescent brain has not reached adult maturity

Why do adolescents show differences from adults with respect to risk-taking, planning, inhibiting impulses, and generating alternatives? Recent research suggests a biological dimension to adolescent behavioral immaturity: the human brain does not settle into its mature, adult form until after the adolescent years have passed and a person has entered young adulthood.

Advances in magnetic resonance imaging (MRI) technology have opened a new window into the differences between adolescent and adult brains. MRI technology produces exquisitely accurate pictures of the inner body and brain. Beginning in the 1990s, "functional" MRIs have allowed mapping not only of brain anatomy but observation of brain functioning while an individual performs tasks involving speech, perception, reasoning, and decision-making. *See, e.g.*, Kenneth K. Kwong et al., *Dynamic Magnetic Resonance Imaging of Human Brain Activity During Primary Sensory Stimulation*, 89 Proc. Nat'l Acad. Sci. 5675 (1992) (early use of functional MRI to image the brain). Longitudinal MRI studies have allowed researchers to track individual brains as they develop through adolescence by observing them at periodic intervals. *See, e.g.*, Jay N. Giedd et al., *Brain Development During Childhood and Adolescence: A Longitudinal MRI Study*, 2 Nature Neuroscience 861, 861 (1999) (study of 145 children and adolescents scanned up to five times over approximately 10 years).

Of particular interest with regard to decision-making and criminal culpability is the development of the frontal lobes of the brain. The frontal lobes, especially the prefrontal cortex, play a critical role in the executive or "CEO" functions of the brain which are considered the higher

functions of the brain. *See* Elkhonon Goldberg, *The Executive Brain: Frontal Lobes and the Civilized Mind* 23 (2001). They are involved when an individual plans and implements goal-directed behaviors by selecting, coordinating, and applying the cognitive skills necessary to accomplish the goal. *See id.* at 24. Disruption of functions associated with the frontal lobes may lead to impairments of foresight, strategic thinking, and risk management. *See* M. Marsel Mesulam, *Behavioral Neuroanatomy, in Principles of Behavioral and Cognitive Neurology* 1, 47-48 (M. Marsel Mesulam ed., 2d ed. 2000). Frontal lobe impairment has been associated with greater impulsivity, difficulties in concentration, attention, and self-monitoring, and impairments in decision-making. *Id.* at 42-45. One "hallmark of frontal lobe dysfunction is difficulty in making decisions that are in the long-term best interests of the individual." *See* Antonio R. Damasio & Steven W. Anderson, *The Frontal Lobes, in Clinical Neuropsychology* 404, 434 (Kenneth M. Heilman & Edward Valenstein eds., 4th ed. 2003).

Neurodevelopmental MRI studies indicate this executive area of the brain is one of the last parts of the brain to reach maturity. *See* Nitin Gogtay et al., *Dynamic Mapping of Human Cortical Development During Childhood Through Early Adulthood*, 101 Proc. Nat'l Acad. Sci. 8174, 8177 (2004). In early adolescence, the proliferation of gray matter – consisting of neuron cell bodies and dendrites – peaks. *See* Giedd et al., *supra*, at 861-862. During adolescence, the size of the frontal lobes is not largely altered, but their composition, consisting of gray and white brain matter, undergoes dynamic change while cognitive functioning improves. One important change is that gray matter thins. *See* Elizabeth R. Sowell et al., *Mapping Continued Brain Growth and Gray Matter Density Reduction in Dorsal Frontal Cortex: Inverse Relationships During Postadolescent Brain Maturation*, 21 J. Neurosci. 8819, 8821 (2001) (studying 7-11, 12-16, and 23-30 age groups). A contributing factor to the thinning of gray matter is thought to be "pruning" which strengthens the

connections between the remaining neurons. *See* Peter R. Huttenlocher, *Neural Plasticity: The Effects of Environment on the Development of the Cerebral Cortex* 41, 46-47, 52-58, 67 (2002).

MRI research reveals that in the same regions where gray matter thins, white matter significantly increases during adolescence, likely through a process called "myelination" in which a substance called myelin is wrapped around brain cell axons. Myelination improves the connectivity of neural tracts by insulating the axon thereby greatly speeding up the communication between cells, allowing the brain to process information more efficiently and reliably. *See* Goldberg, *supra*, at 144. In a study of minors ages 5 through 17, white matter within the prefrontal area of the frontal lobes steadily increased with age, likely reflecting the advances of myelination. Allan L. Reiss et al., *Brain Development, Gender and IQ in Children: A Volumetric Imaging Study*, 119 Brain 1763, 1767-1768 (1996). A longitudinal MRI study at the National Institute of Mental Health documented an increase in white matter continuing through the teenage years to at least age 22. Giedd et al., *supra*, at 861-862.[3]

A recent longitudinal MRI study captured common patterns of development by rescanning the same children and adolescents ages 4 to 21 every two years over the course of a ten-year period. Nitin Gogtay et al., *supra*.

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[3] *See also* Reiss, *supra*, at 1770 (finding expansion of white matter particularly prominent in prefrontal region of brain, an area implicated in higher order regulation of cognitive functions); Elizabeth R. Sowell et al., *Localizing Age-Related Change in Brain Structure Between Childhood and Adolescence Using Statistical Parametric Mapping*, 9 NeuroImage 587, 593 (1999) (associating change from gray to white matter in dorsal cortices of the frontal and parietal lobes with myelination in these regions of the brain); Elizabeth R. Sowell et al., *In Vivo Evidence for Post-Adolescent Brain Maturation in Frontal and Striatal Regions*, 2 Nature Neuroscience 859, 860 (1999) (remarking that reduction of frontal lobe gray matter in adolescence probably reflects increased myelination that may improve cognitive processing in adulthood).

Researchers found that the maturation of the brain cortex, or outer layer, followed "regionally relevant milestones in cognitive and functional development," *id.* at 8177, with "[p]arts of the brain associated with more basic functions matur[ing] early." *Ibid.* Again, the study confirmed that "[l]ater to mature were areas involved in executive function, attention, and motor coordination (frontal lobes)." *Ibid.*

These findings from recent MRI research converge with earlier post-mortem studies and other research exploring the maturation process of the human brain. Close correlations had previously been noted between myelination and acquisition of brain functions. *See* Paul I. Yakovlev & Andre-Roch Lecours, *The Myelogenetic Cycles of Regional Maturation of the Brain, in Regional Development of the Brain in Early Life* 3, 63-64 (Alexandre Minkowski ed., 1967). Late maturation of the frontal lobes is also consistent with electroencephalogram (EEG) research showing that the frontal executive region matures from ages 17 to 21 – after maturation appears to cease in other brain regions. William J. Hudspeth & Karl H. Pribram, *Psychophysiological Indices of Cerebral Maturation*, 21 Int'l J. Psychophysiology 19, 26-27 (1990); *see also* R.W. Thatcher et al., *Human Cerebral Hemispheres Develop at Different Rates and Ages*, 236 Science 1110, 1113 (1987) (EEG study revealed that, between age 15 and adulthood, fiber networks focused primarily in the frontal lobes grew, allowing for greater functional associations among the regions of the brain).

Emerging from the neuropsychological research is a striking view of the brain and its gradual maturation, in far greater detail than seen before. Although the precise underlying mechanisms continue to be explored, what is certain is that, in late adolescence, important aspects of brain maturation remain incomplete, particularly those involving the brain's executive functions.

4. Given that 16- and 17-year-olds as a group are less mature developmentally than adults, imposing capital punishment on such adolescents does not serve the judicially recognized purposes of the sanction

This Court has recognized that the constitutional legitimacy of the death penalty depends on its ability to serve "as retribution and deterrence of capital crimes." *Atkins v. Virginia*, 536 U.S. 304, 319 (2002) (internal quotation marks omitted). "Unless the imposition of the death penalty * * * measurably contributes to one or both of these goals, it is nothing more than the purposeless and needless imposition of pain and suffering, and hence an unconstitutional punishment." *Ibid.* (internal quotation marks omitted).

"With respect to retribution * * * the severity of the appropriate punishment necessarily depends on the culpability," *i.e.*, the blameworthiness, of the offender. *Ibid*; *see also Stanford v. Kentucky*, 492 U.S. 361, 382 (1989) (O'Connor, J., concurring in part and concurring in the judgment) (Eighth Amendment requires a proportional "nexus between the punishment imposed and the defendant's blameworthiness") (internal quotation marks omitted).

The Court already has recognized that personal culpability is lessened in the case of persons with mental retardation due to "diminished capacities to understand and process information, to communicate, to abstract from mistakes and learn from experience, to engage in logical reasoning, to control impulses, and to understand the reactions of others." *Atkins*, 536 U.S. at 318. When such a category of offenders exhibits significantly diminished culpability for its acts, capital punishment is prohibited because the highest degree of societal retribution is not justified. *Id.* at 319; *see also* Elizabeth S. Scott & Laurence Steinberg, *Blaming Youth*, 81 Tex. L. Rev. 799, 822-839 (2003) (proposing to exclude adolescents categorically from execution due to their developmental immaturity).

Similarly, the emerging nature of adolescent character makes the execution of 16- and 17-year-olds fall short of the purposes this Court has articulated for capital punishment. That emerging character, demonstrated by developmentally immature decision-making when compared with adults, and paralleled by a still developing brain, diminishes adolescent blameworthiness and does not merit the retribution of execution because even "the culpability of the average [adult] murderer is insufficient to justify the most extreme sanction." *Atkins*, 536 U.S. at 319.

With regard to deterrence, capital punishment will have a questionable effect on adolescents as a group because they are more impulsive and less able to anticipate the consequences of their actions. Indeed, although identifying comparable groups of juveniles who have been tried as adults versus those who have been tried as juveniles has proven difficult, research has failed to establish that the threat of adult criminal punishment through waiver or transfer into the adult criminal justice system has had any deterrent effect on adolescent misconduct. *See* Simon I. Singer & David McDowall, *Criminalizing Delinquency: The Deterrent Effects of the New York Juvenile Offender Law*, 22 L. & Soc'y Rev. 521, 529-532 (1988) (measuring New York arrest rates before and after change to require prosecution of some adolescents in criminal court); Eric L. Jensen & Linda K. Metsger, *A Test of the Deterrent Effect of Legislative Waiver on Violent Juvenile Crime*, 40 Crime & Delinq. 96, 100-102 (1994) (evaluating deterrent effect of Idaho statute mandating criminal processing as adults of adolescents charged with serious offenses).[4]

[4] Studies comparing recidivism rates between comparable groups of adolescents processed by either the criminal or juvenile justice systems showed no significant specific deterrent effect from exposure to the adult criminal justice system. *See* Jeffrey Fagan, *Separating the Men From the Boys: The Comparative Advantage of Juvenile Versus*

(Continued on following page)

As in the case of offenders with mental retardation, "it is the same cognitive and behavioral impairments that make these defendants less morally culpable * * * that also make it less likely that they will process the information of the possibility of execution as a penalty and, as a result, control their conduct based on that information." *Atkins*, 536 U.S. at 320. Thus, under *Atkins*, because research indicates that imposing capital punishment on adolescents does not "measurably contribute" to the goals of retribution or deterrence, it is "an unconstitutional punishment" in such cases. *Id.* at 319.

B. Individualized Capital Sentencing Proceedings Do Not Account For The Mitigating Effect Of Adolescence In A Sufficiently Reliable Manner To Meet The Court's Eighth Amendment Standards

Reliability has long been a touchstone of this Court's Eighth Amendment jurisprudence governing capital sentencing proceedings because of the severity and finality of the sanction. The Court has made clear that reliability takes on a heightened significance in the determination of whether a defendant should be sentenced to death because once the sanction is carried out, it is irreversible and cannot be rescinded, even if error is later revealed. "Because of that qualitative difference, there is a corresponding difference in the need for reliability in the determination that death is the appropriate punishment

Criminal Court Sanctions on Recidivism Among Adolescent Felony Offenders, in Sourcebook on Serious, Violent & Chronic Juvenile Offenders 238, 249-250, 253-254 (James C. Howell et al. eds., 1995) (indicating recidivism rates were not generally lower for adolescents in the criminal justice system as opposed to those treated by the juvenile justice system, in a cross-jurisdictional study); Lawrence Winner et al., *The Transfer of Juveniles to Criminal Court: Reexamining Recidivism Over the Long Term*, 43 Crime & Delinq. 548, 551-562 (1997) (comparing recidivism rates of comparable adolescent offenders in Florida).

in a specific case." *Woodson v. North Carolina*, 428 U.S. 280, 305 (1976) (plurality opinion). Of course, the reliability of the determination depends in substantial part on the reliability of the information that is presented to the decisionmaker. "[A]ccurate sentencing information is an indispensable prerequisite to a reasoned determination of whether a defendant shall live or die by a jury of people who may never before have made a sentencing decision." *Gregg v. Georgia*, 428 U.S. 153, 190 (1976) (joint opinion).

Critical to the State of Missouri's position in this case is the assumption that individualized sentencing can reliably identify those adolescent defendants who do not merit execution. Individualized capital sentencing does allow the presentation of mitigating evidence, including that related to youth, which, of course, may be relevant in certain cases of young adults as well. But the changes in behavior, attitudes, perspective, risk-taking and personality that are the hallmarks of adolescence preclude reliably predicting a juvenile defendant's character in adulthood or the likelihood that he or she will continue to be dangerous in adulthood. In simpler terms, assessing an adolescent is like attempting to hit a moving target because of the developmental transitions characteristic of adolescence.

1. The unsettled nature of adolescent personality confounds attempts to make sufficiently reliable determinations about the character and future behavior of adolescent defendants to support execution

a. Under this Court's Eighth Amendment jurisprudence, capital sentencing juries must be allowed to consider evidence of the "character and record of the individual offender." *Woodson*, 428 U.S. at 304 (plurality opinion); *Lockett v. Ohio,* 438 U.S. 586, 604 (1978) (plurality opinion) (requiring that "a defendant's character or record" not be precluded from consideration as mitigating evidence). Various state statutory schemes specifically allow evidence of a defendant's character at capital sentencing. *See, e.g.*, Fla. Stat. ch. 921.141(1) ("evidence may be presented as to any matter that the court deems relevant to the nature of the crime and the character of the defendant"); Cal. Penal Code § 190.3 ("evidence may be presented * * * as to * * * the defendant's character").

This Court has held that capital sentencing juries also are constitutionally permitted to consider the future dangerousness of a defendant. *See Jurek v. Texas*, 428 U.S. 262, 274-275 (1976) (plurality opinion).[5] Moreover, capital sentencing juries are sometimes required by statute to consider the future dangerousness of the defendant. Among States with the death penalty for juveniles, three include the defendant's future dangerousness as a factor that jurors must consider at sentencing in a capital case.[6] In a fourth State allowing the death penalty for juveniles, a finding of future dangerousness is required for imposition of the death penalty.[7] These four States, taken together, have executed 82 percent of the juveniles executed since 1976.

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[5] *See also Simmons v. South Carolina*, 512 U.S. 154, 163 (1994) (plurality opinion) (noting that prosecutors "frequently emphasize a defendant's future dangerousness in their evidence and argument at the sentencing phase"); *id.* at 178 (O'Connor, J., concurring in the judgment) (where State puts a capital defendant's future dangerousness at issue, due process entitles defendant to inform jury of parole ineligibility); *California v. Ramos*, 463 U.S. 992, 1003 (1983) (State constitutionally permitted to instruct capital sentencing jury to consider Governor's power to commute a life sentence without possibility of parole to a lesser sentencing allowing parole because it "focuses the jury on the defendant's probable future dangerousness").

[6] Idaho Code § 19-2515(9)(h) (considering whether defendant "has exhibited a propensity to commit murder which will probably constitute a continuing threat to society"); Okla. Stat. tit. 21, § 701.12(7) (considering whether there is a "probability that the defendant would commit criminal acts of violence that would constitute a continuing threat to society"); Va. Code Ann. § 19.2-264.2(1) (same).

[7] Tex. Crim. Proc. Code Ann. § 37.071(2)(b)(1) (precluding imposition of death sentence unless jury finds that "there is a probability that the defendant would commit criminal acts of violence that would constitute a continuing threat to society").

Death Penalty Information Center, Juveniles Executed in the United States in the Modern Era (Since January 1, 1973) (listing 22 juvenile executions), *at* http://www.deathpenaltyinfo.org/article.php?scid=27&did=203 (last visited July 9, 2004). Evidence of future dangerousness also is presented in some jurisdictions as a nonstatutory sentencing factor.[8]

Empirical data suggest that juries tend to consider future dangerousness even when the issue is not raised by the prosecutor in the penalty phase of a capital case. John H. Blume et al., *Future Dangerousness in Capital Cases: Always "At Issue,"* 86 Cornell L. Rev. 397, 405-408 (2001) (presenting data from the Capital Jury Project); *see also* Lawrence T. White, *Juror Decision Making in the Capital Penalty Trial*, 11 L. & Hum. Behav. 113, 124 (1987) (finding factors related to dangerousness are second only to factors related to the nature of the crime in study of reasons why jurors voted for a death sentence).

A capital sentencing jury's determination of future dangerousness is a highly aggravating sentencing factor and may be outcome determinative. A study in Texas showed that capital defendants who did not receive the death penalty were usually those whom juries decided did not pose a future danger to society. *See* James W. Marquart et al., *Gazing into the Crystal Ball: Can Jurors Accurately Predict Dangerousness in Capital Cases?*, 23 L. & Soc'y Rev. 449, 463 (1989) (finding 85% of juries between 1974 and 1988 refusing to impose death penalty failed to find future dangerousness of defendant); *see also* William J. Bowers et al., *The Capital Sentencing Decision: Guided Discretion, Reasoned Moral Judgment, or Legal Fiction, in*

[8] *Cf. United States v. Spivey*, 958 F. Supp. 1523, 1534 (D.N.M. 1997) (allowing consideration of the nonstatutory aggravating factor of future dangerousness); *United States v. Nguyen*, 928 F. Supp. 1525, 1542 (D. Kan. 1996) (allowing a nonstatutory aggravating factor asking whether "[t]he defendant represents a continuing danger to the lives and safety of others in the future").

America's Experience with Capital Punishment 413, 430-431 (James R. Acker et al. eds., 2d ed. 2003) (finding in 14-State study that "defendant's likely future dangerousness [was] an especially prominent theme" in jury deliberations); Theodore Eisenberg & Martin T. Wells, *Deadly Confusion: Juror Instructions in Capital Cases*, 79 Cornell L. Rev. 1, 4-6 (1993) (finding in South Carolina study that future dangerousness ranked second only to crime itself in attention given in jury's penalty phase deliberations, overshadowing evidence presented in mitigation).

b. These two common sentencing factors of character and future dangerousness, however, present special problems of reliability in capital sentencing proceedings for 16- and 17-year-old defendants. Although mental health professionals[9] are able to characterize the functional and behavioral features of an individual adolescent, their ability to reliably predict future character formation, dangerousness, or amenability to rehabilitation is inherently limited. This is true even for adolescents with histories of delinquent behavior because misconduct diminishes at a high rate between adolescence and adulthood. Thus, mental health professionals' ability to reliably distinguish between the relatively few adolescents who will continue as career criminals and the vast majority of adolescents who will, as adults, "repudiate their reckless experimentation" is limited. *See* Steinberg & Scott, *Less Guilty by Reason of Adolescence: Developmental Immaturity, Diminished Responsibility, and the Juvenile Death Penalty*, *supra*, at 1016.

The manual that governs the professional evaluation of psychiatric disorders wisely bars diagnosis of antisocial personality disorder in individuals under the age of 18. American Psychiatric Association, *Diagnostic and Statistical*

[9] "Mental health professionals" is used here to include psychologists, psychiatrists and others who assess adolescents, particularly within the context of capital sentencing.

Manual of Mental Disorders 702, 706 (4th ed. text rev. 2000) (DSM). For adolescent personality disorders in general, the DSM cautions that they cannot be diagnosed except in the "relatively unusual instances in which the individual's particular maladaptive personality traits appear to be pervasive, persistent, and unlikely to be limited to a particular developmental stage," *id.* at 687, or to "an episode of an Axis I disorder," *e.g.*, depression. *Ibid.* The DSM's limitation on assessing antisocial personality disorder is even more severe, categorically prohibiting its diagnosis "in individuals under age 18 years." *Ibid.*

Consequently, attempts to predict at capital sentencing an adolescent offender's character formation and dangerousness in adulthood are inherently prone to error and create an obvious risk of wrongful execution. The same evidence which could be used to argue that a death sentence is warranted in a case of an adult defendant may, in an adolescent, very well reflect transitory behavior that would not support such an argument.

This problem arises, in particular, in the labeling of some adolescent offenders as psychopaths. Psychopathy, sometimes referred to as sociopathy, is an adult personality feature defined chiefly by a combination of antisocial behavior, callousness, and emotional detachment. *See* Robert D. Hare, *Psychopathy: A Clinical Construct Whose Time Has Come*, 23 Crim. Just. & Behav. 21, 25 (1996). Psychopaths have been described as "[l]acking in conscience and in feelings for others, [and] . . . cold-bloodedly tak[ing] what they want and do[ing] what they please, violating social norms and expectations without the slightest sense of guilt or regret." *Id.* at 26.

Unlike disorders such as depression, psychopathy is presumed to be deep seated, stable over time, and resistant, if not absolutely impervious, to change. Some experts have gone so far as to conclude that "at this time there is *no empirical* evidence to suggest that psychopathy is treatable." Carl B. Gacono et al., *Treating Conduct Disorder, Antisocial, and Psychopathic Personalities, in Treating Adult and*

Juvenile Offenders with Special Needs 99, 113 (Jose B. Ashford et al. eds., 1997) (emphasis in original). As a group, psychopaths "are responsible for a markedly disproportionate amount of the serious crime, violence, and social distress in every society." Hare, *supra*, at 26. One analysis concluded that psychopathic offenders were approximately four times as likely to commit a future violent crime as were non-psychopathic offenders. James F. Hemphill et al., *Psychopathy and Recidivism: A Review*, 3 Legal & Criminological Psycholog. 139, 160 (1998).

Evidence of psychopathy can strongly encourage the imposition of the death penalty in a particular case. Indeed, some of the cases which have shaped the Court's death sentencing jurisprudence have centered on evidence of psychopathic tendencies. *See, e.g., Estelle v. Smith*, 451 U.S. 454, 459-460 (1981) (State's evidence that defendant was "a very severe sociopath"); *Satterwhite v. Texas*, 486 U.S. 249, 259-260 (1988) (State's evidence that defendant would be a continuing threat to society and was "as severe a sociopath as you can be"); *Barefoot v. Estelle*, 463 U.S. 880, 918-919 (1983) (Blackmun, J., dissenting) (State's evidence that defendant was a "criminal sociopath" whom no treatment could change). In a recent study measuring the effect on laypersons of hypothetical traits, participants were considerably more likely to support a death sentence when an adolescent offender was described as psychopathic. John F. Edens et al., *Psychopathic Traits Predict Attitudes Toward a Juvenile Capital Murderer*, 21 Behav. Sci. & L. 807, 822 (2003).

The antisocial phenomena that are emblematic of psychopathy in adults are difficult to assess with adolescents. The researcher whose groundbreaking description of the psychopathic personality became the basis for modern diagnostic techniques warned that "the child or the adolescent will for a while behave in a way that would seem scarcely possible to anyone but the true psychopath and later change, becoming a normal and useful member of society." Hervey Cleckley, *The Mask of Sanity* 270 (5th ed.

1976); *see also* John F. Edens et al., *Assessment of "Juvenile Psychopathy" and Its Association with Violence: A Critical Review*, 19 Behav. Sci. & L. 53, 77 (2001) ("Because most adolescents manifest some 'traits' and behaviors during this period that may be phenotypically similar to symptoms of psychopathy, adolescence may be the most difficult stage of life in which to detect this personality pattern.").

Using standard psychological appraisals, various behaviors and traits that are associated with normal development in adolescents are, in adults, indicative of psychopathy. These include proneness to boredom, impulsivity, irresponsibility, failure to accept responsibility for one's actions, and unstable interpersonal relationships. *See* Robert D. Hare, *Hare Psychopathy Checklist Revised* (2d ed. 2003) (PCL-R).[10] More recently, this checklist has been modified for adolescents, Adelle E. Forth et al., *Hare Psychopathy Checklist: Youth Version* (2003) (PCL-YV), but the revision maintains the basic structure of the adult version, modifying application of some adult factors, such as the adult "short-term marital relationships" factor. Adelle E. Forth & Heather C. Burke, *Psychopathy in Adolescence: Assessment, Violence, and Developmental Precursors, in Psychopathy: Theory, Research and Implications for Society* 205, 207 (David J. Cooke et al. eds., 1995).

[10] The complete Hare Psychopathy Checklist Revised comprises two factors. The "Interpersonal/Affective" factor includes glibness/superficial charm; grandiose sense of self-worth; pathological lying; conning/manipulative; lack of remorse or guilt; shallow affect; callous/lack of empathy; failure to accept responsibility for actions. The "Social Deviance" factor includes need for stimulation/proneness to boredom/parasitic lifestyle; poor behavioral controls; early behavior problems; lack of realistic long-term goals; impulsivity; irresponsibility; juvenile delinquency; revocation of conditional release and criminal versatility. Other items are promiscuous sexual behavior and many short-term marital relationships. Robert D. Hare, *Hare PCL-R Technical Manual* 85 (2d ed. 2003).

Although the PCL-YV and other measures of psychopathy may aid in making short-term predictions of violent behavior in adolescence, "they provide little support for the argument that psychopathy during adolescence is a robust predictor of *future* violence, particularly violence that occurs beyond late adolescence." Edens et al., *Assessment of "Juvenile Psychopathy" and Its Association with Violence: A Critical Review*, *supra*, at 73 (emphasis in original). Despite findings of stability over a few months of psychopathic traits among adolescents, "[c]learly, there are no data to determine the actual risk for adult diagnosis in children who score high on psychopathic traits." Paul J. Frick et al., *The 4 Year Stability of Psychopathic Traits in Non-Referred Youth*, 21 Behav. Sci. & L. 713, 732 (2003). In gauging whether two different tests of psychopathy tracked each other or merely tracked indicia of normal immaturity in adolescents, one study concluded that "[t]hese measures of psychopathy, a distinctive constellation of enduring personality traits, were less strongly associated with one another than with measures of immaturity, a broad set of incapacities associated with normative phases of development [in adolescents]." Jennifer L. Skeem & Elizabeth Cauffman, *Views of the Downward Extension: Comparing the Youth Version of the Psychopathy Checklist with the Youth Psychopathic Traits Inventory*, 21 Behav. Sci. & L. 737, 764 (2003); *see also* Daniel Seagrave & Thomas Grisso, *Adolescent Development and the Measurement of Juvenile Psychopathy*, 26 L. & Hum. Behav. 219, 229 (2002) (expressing concern over "false positive" rate in identifying psychopathic traits in adolescents).

c. The sentencing process is ill-suited to discern the difference between transitory adolescent behavior and enduring adult character traits. These distinctions are critical for determining a capital defendant's character and future dangerousness. The observable behavior of different adolescents can be identical in adolescents who will persist as criminal offenders through adulthood and those who will not. *See* Edens et al., *Assessment of "Juvenile Psychopathy" and Its Association with Violence: A Critical Review*, *supra*,

at 59 (measures of psychopathy may tap "relatively *normative* and *temporary* characteristics of adolescence rather than deviant and stable personality features") (emphasis in original); *cf.* Thomas Grisso, *Double Jeopardy: Adolescent Offenders with Mental Disorders* 64-65 (2004) (discontinuity of disorders in adolescence creates "moving targets" for identification of mental disorders); Edward P. Mulvey & Elizabeth Cauffman, *The Inherent Limits of Predicting School Violence*, 56 Am. Psychologist 797, 799 (2001) ("Assessing adolescents, therefore, presents the formidable challenge of trying to capture a rapidly changing process with few trustworthy markers.").

The likelihood of error in ascertaining putatively enduring features of an adolescent's behavior is high. The fundamental problem is found in the inability to distinguish in a reliable way between the few adolescent offenders who may not be amenable to rehabilitation and the many who will spontaneously desist or who will respond to sanction or intervention. The absence of proof that assessments of adolescent behavior will remain stable into adulthood invites unreliable capital sentencing based on faulty appraisals of character and future conduct.

2. The lapse of time between a crime and sentencing tends to complicate assessment of the adolescent capital defendant

Even if a sufficiently reliable means existed to assess the true character and future dangerousness of an adolescent defendant, the maturation of an adolescent that occurs between the date of a crime and the time of a capital sentencing assessment further complicates efforts to capture accurately an adolescent's capacities and maturity at the time of an offense. The lapse of time is likely to involve much more significant psychological changes in adolescents than in adults.

An evaluation performed for the purpose of capital sentencing will consider an adolescent who has, necessarily,

aged since the date of the offense. Having advanced further through puberty, the defendant may have more the appearance of a man than the boy who committed the offense. In one juvenile case, jurors imposed a death sentence, at least in part, based on the defendant's seemingly more adult physical appearance. Michael E. Antonio et al., *Capital Jurors as the Litmus Test of Community Conscience for the Juvenile Death Penalty*, 87 Judicature 275, 282 (2004) (discussing data from the Capital Jury Project). The defendant was nearing 21 years of age by the time of trial, was physically imposing, unusually tall, and characterized by one juror as a "tall, pretty muscular black guy." *Ibid.* Interestingly, several jurors described him "as utterly emotionless, despite other jurors' reports of his tears at the mention of his murdered brother" and his mother's testimony. *Ibid.*

Neurodevelopmental maturation may have altered the adolescent's impulsivity, difficulty in weighing options, vulnerabilities to situational factors or other features of relative developmental immaturity that existed at the time of the offense. Exposure to the adult corrections system while awaiting trial and sentencing can also affect adolescents, their behavior and their presentation. In a study of the impact of incarceration on adolescents, offenders reported that, at best, experience in adult facilities was a test of will and endurance and, at worst, a painful and denigrating experience that served as reason to become "more angry, embittered, cynical and defeated." Donna Bishop & Charles Frazier, *Consequences of Transfer*, *in The Changing Borders of Juvenile Justice: Transfer of Adolescents to the Criminal Court* 227, 259 (Jeffrey Fagan & Franklin E. Zimring eds., 2000).

A more adult appearance at sentencing is harder to reconcile with whatever mitigating evidence of immaturity may be introduced. The professional opinion rendered by experts for the purpose of capital sentencing and the impression left with the sentencer during trial will reflect an older, more mature person, even though the offending

behaviors at issue were adolescent. Thus, in many cases, the judge and jury will encounter a person who is different in highly relevant respects from the individual who committed the crime. The passage of months or perhaps years between the offense and sentencing may punish a defendant because he appears, thinks, and behaves in a more mature fashion than he did when he committed the offense, eliminating the opportunity to judge the defendant's developmental state at the time of the crime. *Cf.* Richard L. Wiener et al., *Guided Jury Discretion in Capital Murder Cases: The Role of Declarative and Procedural Knowledge*, Psych. Pub. Pol'y & L. (forthcoming 2004) (ms. at 74-82) (studying the inadequacies of jury instructions to explain needed concepts in the penalty phase of first-degree murder trials).

3. Unconscious racism may falsely attribute greater culpability to African American adolescent offenders

The assessment of the maturity and responsibility of individual adolescent offenders also can be impermissibly influenced by unconscious bias. Recent research has revealed that a stereotyped belief that African American adolescents possess more adult-like criminal intent may taint judgments about the culpability of adolescent offenders. Police officers and probation officers reported more negative trait ratings, greater perceived culpability, less child-like qualities and recommended harsher punishment for adolescents after the officers were provided a set of subliminal cues related to African Americans. Sandra Graham & Brian S. Lowery, *Priming Unconscious Racial Stereotypes About Adolescent Offenders*, L. & Hum. Behav. (forthcoming 2004) (ms. at 18-19, 25-26). Police and probation officers induced to think about African Americans were less likely to judge the hypothetical juvenile offenders as immature, and more likely to think of them as adult-like in their behavior. *Ibid.*

Previous research found that probation officers are more likely to attribute the criminality of African American adolescents to negative personal defects such as a lack of remorse, while they are more likely to attribute criminal behavior of white adolescents to negative environmental causes such as a dysfunctional family. George S. Bridges & Sara Steen, *Racial Disparities in Official Assessments of Juvenile Offenders: Attributional Stereotypes as Mediating Mechanisms*, 63 Am. Soc. Rev. 554, 559, 561-564 (1998) (summarizing regression analysis of 233 probation officer reports controlling for variables such as age, sex, offense, and prior record).[11]

C. Individualized Capital Sentencing Cannot Correct For The Heightened Risk Of Error Produced By Immature Adolescent Decision-making At Earlier Stages Of The Criminal Process

Judgments made by adolescents, who on average are less mature than adults, will also affect a defendant's participation at the stages of the criminal process before sentencing. Adolescent immaturity undermines a defendant's ability to make meaningful and fully informed decisions to manage his or her own defense. Decisions by a defendant throughout the investigatory and trial process may influence whether the death penalty will be sought or imposed. As is true for defendants with mental retardation, the possibility

[11] Since 1976, 55% of those executed in the United States who were under 18 at the time of their offense were African American or Latino. Death Penalty Information Center, Juveniles Executed in the United States in the Modern Era (Since January 1, 1973) (listing 22 juvenile executions since 1976), *at* http://www.deathpenaltyinfo.org/article.php?scid=27&did=203 (last visited July 9, 2004). In contrast, 40% of the adult offenders sentenced to death since 1976 were African American or Latino. Death Penalty Information Center, Execution Database (listing 895 adult executions since 1976), *at* http://www.deathpenaltyinfo.org/executions.php (last visited July 9, 2004).

of false confessions, difficulties in giving meaningful assistance to counsel, and poor performance as witnesses all increase the likelihood that adolescents will be convicted, and then executed, in error. *See Atkins*, 536 U.S. at 320-321.

A recent analysis found that adolescents were overrepresented among those who falsely confessed in response to interrogation. Steven A. Drizin & Richard A. Leo, *The Problem of False Confessions in the Post-DNA World*, 82 N.C. L. Rev. 891, 944 (2004). Among a total of 113 false confessors, 16% were between the ages of 16 and 17, representing the highest concentration among any averaged two-year age group. *Id.* at 945, table 3.[12] Among all cases studied, false confessions were concentrated in the most serious offenses, the overwhelming majority occurring in murder cases (81%), followed by cases of rape (9%) and arson (3%). *Id.* at 946. One case was that of the Central Park jogger victim in which four 14- to 16-year-old defendants were convicted of rape or other crimes on the basis of their confessions, but later were exonerated by DNA evidence linking the crime to a notorious serial rapist. *Id.* at 894-900.

False evidence presented by authorities to an individual in an effort to elicit a confession can lead an individual to confess to an act he or she did not commit. The same individual may then internalize the confession and confabulate details consistent with the false confession. *See* Saul M. Kassin & Katherine L. Kiechel, *The Social Psychology of False Confessions: Compliance, Internalization, and Confabulation*, 7 Psycholog. Sci. 125, 127 (1996) (69% of test participants signed confessions admitting to errors

[12] Twelve other defendants in the study were not counted in these results because their ages were unknown. *Id.* at 945, n. 350. Together, the 125 defendants in the study constituted "the largest collection of interrogation-induced false confession cases ever assembled and analyzed in the research literature." *Id.* at 924. All cases involved confessions that were "indisputably false." *Id.* at 925.

they did not commit in assigned clerical tasks). Research indicates that adolescents are more susceptible to these kinds of suggestion of guilt than are adults. In a study comparing 15- and 16-year-olds to young adults ages 18 to 26, the adolescents were more likely to take responsibility for a mock crime when presented with false evidence of their guilt. Allison D. Redlich & Gail S. Goodman, *Taking Responsibility for an Act Not Committed: The Influence of Age and Suggestibility*, 27 L. & Hum. Behav. 141, 151 (2003).

The reliability of convictions and sentences can also be directly affected by adolescent defendants' understanding of their legal rights. In a recent study of more than 1,300 adolescents and young adults, researchers found adolescent immaturity of judgment reflected in adolescent decision-making concerning criminal proceedings. Thomas Grisso et al., *Juveniles' Competence to Stand Trial: A Comparison of Adolescents' and Adults' Capacities as Trial Defendants*, 27 L. & Hum. Behav. 333 (2003). The research examined psychosocial influences on legal decisions that criminal defendants are often required to make, involving whether to confess to the police or remain silent, whether or to what extent to communicate with counsel, and whether to accept a prosecutor's plea offer. *Id.* at 336. After participants completed a standardized measure of abilities relevant to competency to stand trial, *i.e.*, participating in and understanding the trial process, researchers went on to assess the relationship between immaturity and the choices made in the course of a criminal adjudication. *Ibid.* Adolescents, including older adolescents who scored at adult levels on measures of capacity relevant to legal competence to stand trial, nonetheless tended more often than adults to make choices that reflected the influences of psychosocial immaturity. *Id.* at 336-337, 343.

Although older adolescents were more likely than younger adolescents to recognize potential risks and understand how unpleasant consequences would be if they occurred, their perception of the likelihood that the adverse

consequences would actually occur was not significantly different than that of younger adolescents. *Id.* at 354. Consequently, the researchers concluded that "psychosocial immaturity may affect a young person's decisions, attitudes, and behavior in the role of defendant in ways that do not directly implicate competence to stand trial, but that may be quite important to how they make choices, interact with police, relate to their attorneys, and respond to the trial context." *Id.* at 361. That means that adolescents "may make different legal decisions than they themselves would make in their adult years." *Id.* at 335.

CONCLUSION

For the reasons set forth above and in respondent's brief, the judgment of the Missouri Supreme Court should be affirmed.

Respectfully submitted,

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